



# PUIaudio



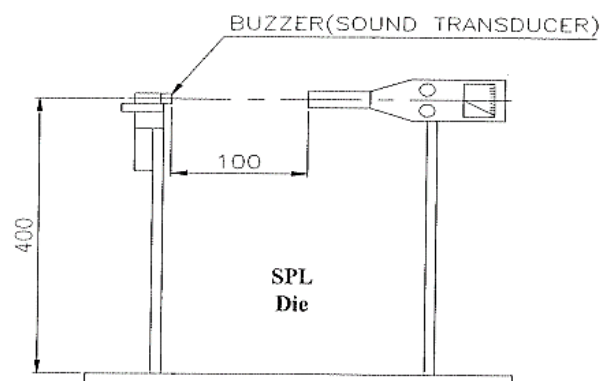
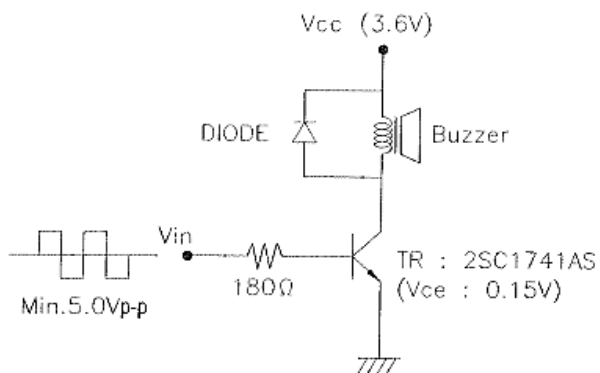
Data Sheet

SMT-0825-S-4-R

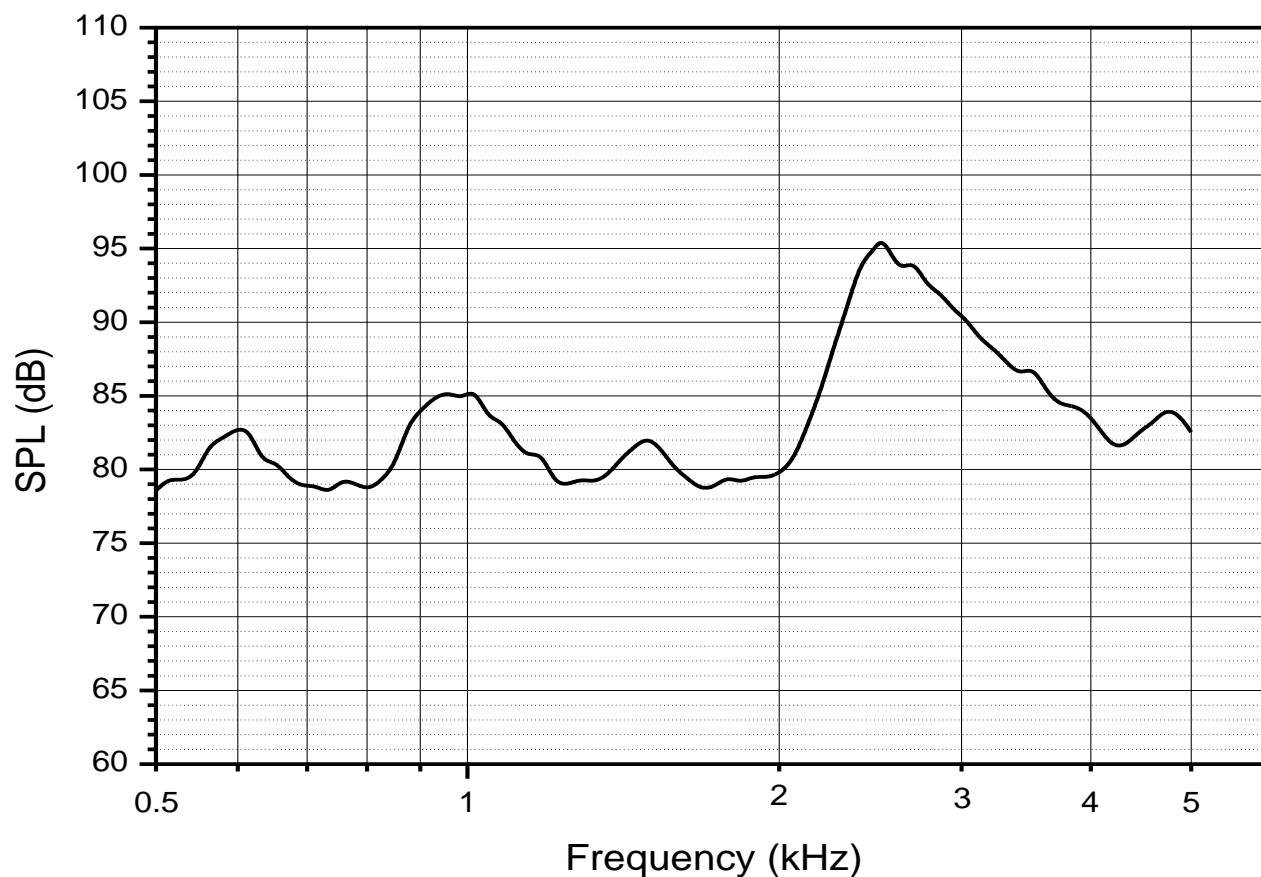
## Specifications

Parameters	Values	Units
Rated Voltage	3.6	V0-pk
Operating Voltage Range	2.5 – 4.5	V0-pk
Current Draw at Rated Voltage	90 (Max.)	mA
Coil Resistance	15 ± 3	Ohms
Minimum SPL @ 10cm	85	dBA
Resonant Frequency	2500	Hz
Housing Material	LCP	-
Terminal Material	Sn plated Phosphor Bronze	-
Weight	0.40	Grams
Acceptable Soldering Methods	Hand Solder, Reflow Solder	See page 2 for soldering information
Environmental Compliances	ROHS/REACH	-
Moisture Sensitivity Level (MSL)	2	-
Storage Temperature	-40 to 85	°C
Operating Temperature	-30 to 70	°C

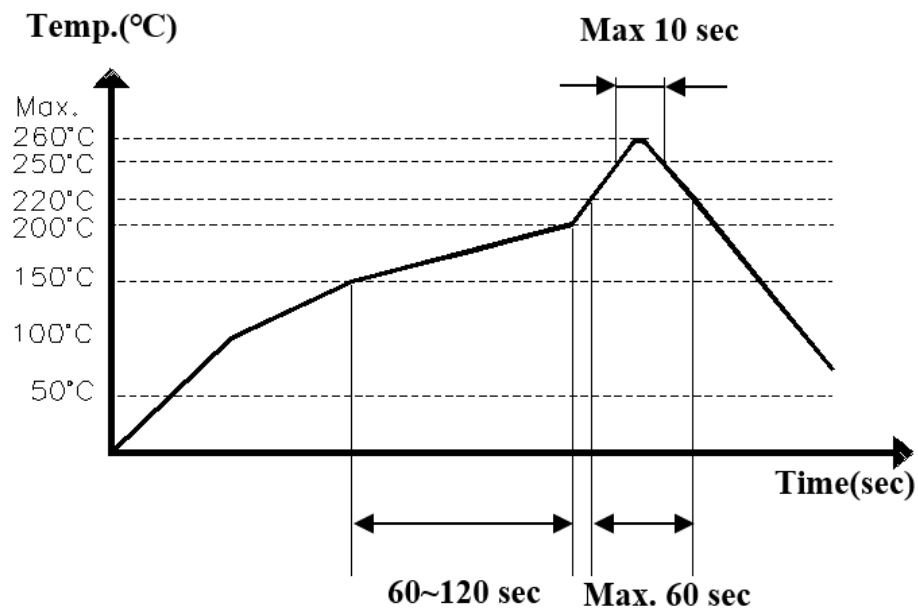
## Measurement Method (Square Wave 3.6Vpk, 2.5kHz @ 10cm)



## Typical Frequency Response (3.6Vpk, 10cm)



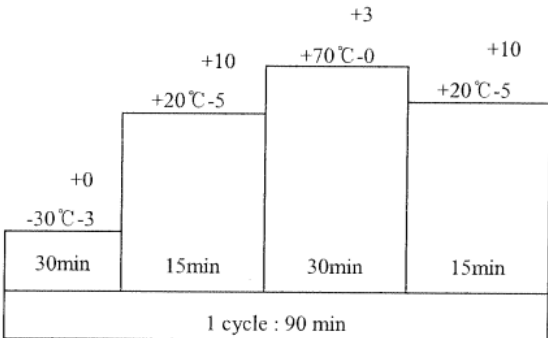
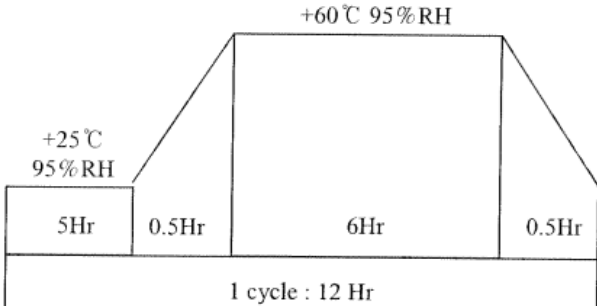
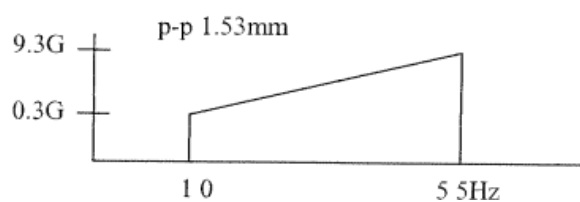
## Recommended Soldering Procedure



\* Reflow profile of lead-free.

\* Manual Soldering Temperature: 350°C within 10 seconds.

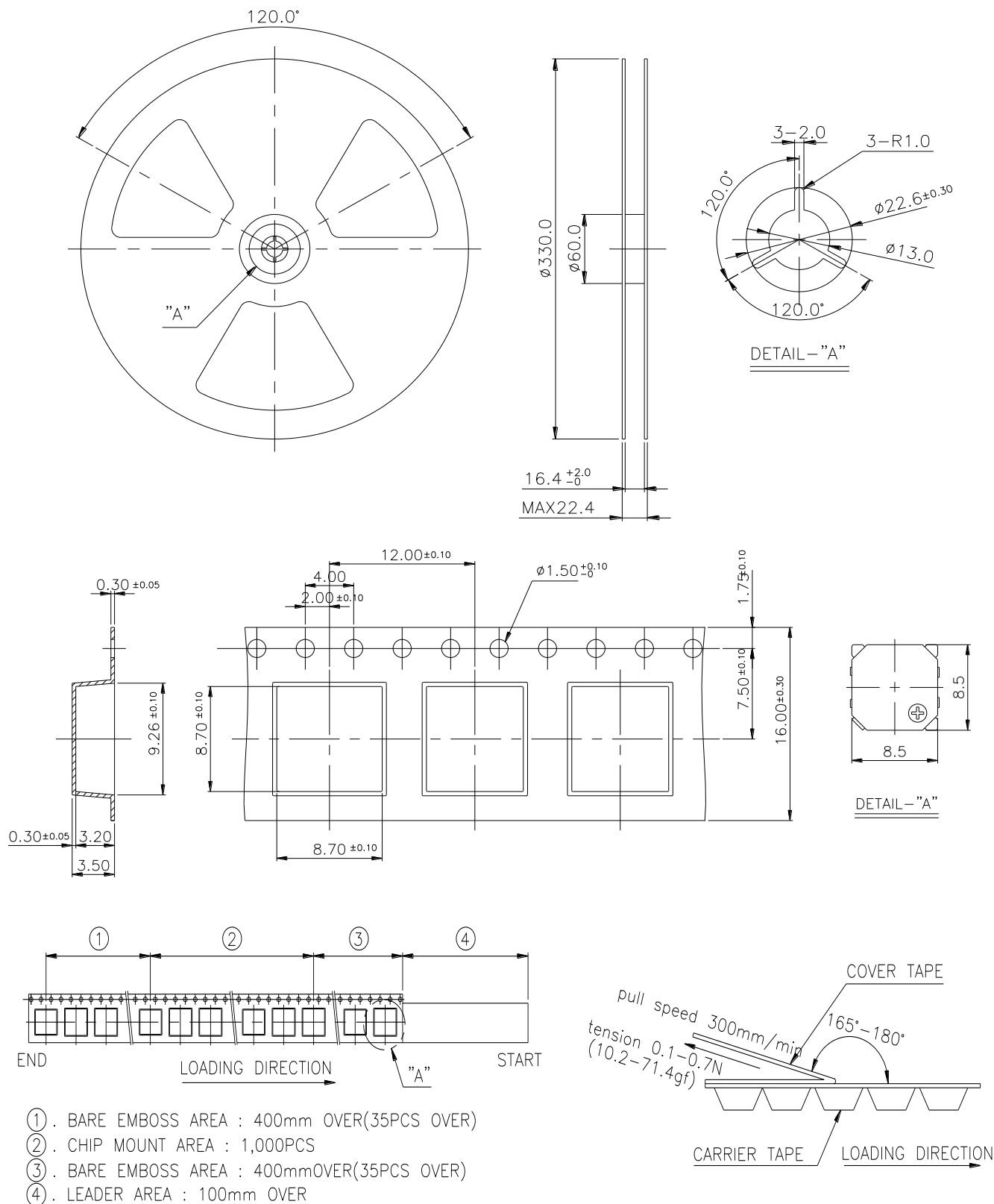
Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at 85°C, then room temperature for 2 hours.
Low Temperature Test	96 hours at -40°C, then room temperature for 2 hours.
Humidity Test	<div></div> <p>5 cycles of test above, then room temperature for 2 hours.</p>
Temperature Cycle Testing	<div></div> <p>10 cycles of test above, then room temperature for 2 hours.</p>
Vibration Test	<div></div> <p>Test above for 2 hours, in each direction x, y, z.</p>
Drop Test	From a height of 120cm, drop the transducer onto 6 different surfaces, 3 times.

After these tests, the SPL variation should be within ±5dB.

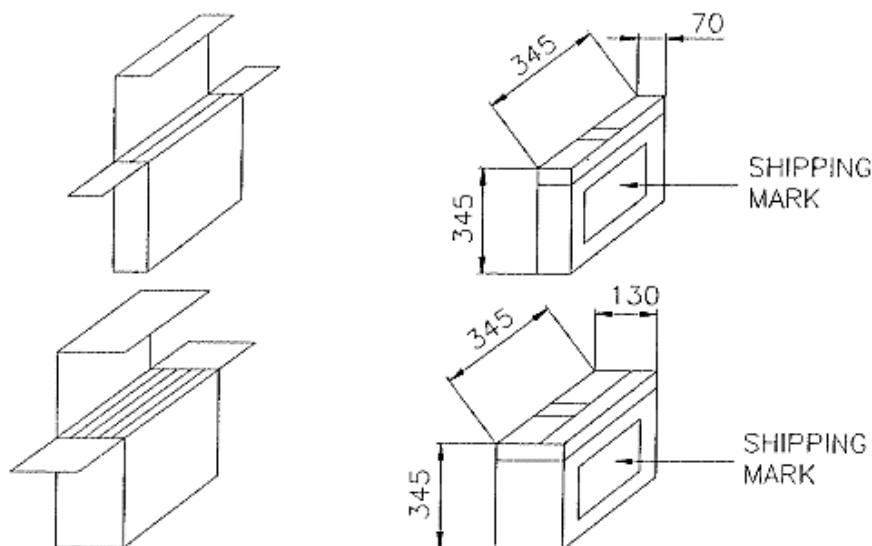


## Packaging



1000 PCS per 1 roll by using the tapping M/C.

2 rolls or 5 rolls per 1 double carton box packed by polypropylene tape.



#### Specifications Revisions

Revision	Description	Date	Approved
-	Released from Engineering	04/01/2005	
A	Added RoHS compliance note	08/10/2005	
B	Revised to Inventor 3-D drawing template	04/30/2010	BR
C	Added reflow note	01/25/2019	ML
D	Revised voltage units, pad max deflection	02/28/2020	MV
E	Updated Spec Format, Add details for Packaging, Reliability, MSL 2 (lot 24L+)	02/24/2025	ML

Note:

- Unless otherwise specified:
  - All dimensions are in millimeters.
  - Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .
- Specifications subject to change or withdrawal without notice.